

U. S. Appl'n. No. 10/814,813

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Page 3Proposed Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 is cancelled.

2. (currently amended) A method of enlarging a travel of a piezoelectric sensor comprising the steps of:

providing an actuator connected at a one end of the actuator to the piezoelectric sensor;

shrinking the actuator by applying a potential difference;

providing an enlarging means having a proximal end and an end opposed to the proximal end, the opposed end of the enlarging means being elastically attached to the piezoelectric sensor and an end of the actuator opposed to the one end of the actuator being connected to the enlarging means; and

enlarging the travel of the actuator by causing the shrinkage of the actuator to rotate the enlarging means about the opposed end of the enlarging means. The method of claim 1,

wherein the piezoelectric sensor is provided with a first electrode and a second electrode is provided at the proximal end of the enlarging means whereby the first and the second electrodes may contact each other when the enlarging means is rotated due to shrinkage of the piezoelectric actuator sensor.

3. (previously presented) A MEMS switch comprising:

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a piezoelectric sensor having a first electrode at a one end of the piezoelectric sensor;

an actuator connected to the piezoelectric sensor at a one end of the actuator; and means for enlarging the travel of the piezoelectric sensor, having a second electrode to face the first electrode, the second electrode being provided at a one end of the means for enlarging, the means for enlarging being connected to an other end of the actuator and an other end of the means for enlarging being elastically attached to the other end of the sensor ~~at an other end of the means for enlarging~~, whereby when the piezoelectric sensor actuator is shrunk by the application of a potential difference the means for enlarging is rotated about the other end of the means for enlarging by the shrinkage of the actuator and the first and second electrodes are thereby brought into electrical contact.

4. (previously presented) The MEMS switch of claim 3, wherein the second electrode is a lateral electrode.

5. (previously presented) The method of claim 2 further comprising the step of switching a contact switch "on" by contacting the first electrode to the second electrode.

6. (currently amended) The method of claim 1 claim 5 further comprising the step of switching a contact switch "off" by removing the application of a potential difference to the actuator piezoelectric sensor and thereby removing the contact between the first electrode [[to]] and the second electrode.

7. (previously presented) The MEMS switch according to claim 4 in which the MEMS switch is a lateral switch.

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8. (previously presented) A MEMS switch comprising:

a piezoelectric sensor capable of being shrunk by the application of a potential difference and having a first electrode at a one end of the piezoelectric sensor;

an actuator connected at a one end of the actuator to the piezoelectric sensor;

means for enlarging the travel of the piezoelectric sensor having a second electrode at a one end of the means for enlarging,

wherein the second electrode faces the first electrode, the means for enlarging is connected to an other end of the actuator, and the means for enlarging has an other end that is elastically connected to an other end of the piezoelectric sensor.

9. (previously presented) The MEMS switch according to claim 8 whereby when the piezoelectric sensor is shrunk by the application of a potential difference the means for enlarging is rotated about the other end of the means for enlarging by the actuator and the first and second electrodes are thereby brought into electrical contact.

10. (previously presented) The MEMS switch according to claim 9 wherein the means for enlarging is shaped like a lever having a one end and an other end.

11. (previously presented) The MEMS switch according to claim 9 whereby when the potential difference is removed from the piezoelectric sensor the means for enlarging is rotated about the other end of the means for enlarging by the actuator in an opposite direction by an elastic recovering force and the first and second electrodes are thereby brought out of electrical contact.